



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,263	02/07/2002	Munenori Sawada	111914	6681
25944	7590	01/11/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			LEWIS, DAVID LEE	
			ART UNIT	PAPER NUMBER
			2673	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/067,263

Applicant(s)

SAWADA, MUNENORI

Examiner

David L. Lewis

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-11 and 15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 5-11 and 15 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 12/30/2005.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 1. Claims 5-11, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Youens (5793355).**

**As in claim 5, Youens teaches of an input system for a portable terminal, comprising a portable terminal which uses a control unit for input, figure 1 item 10, column 3 lines 24-35,**

**wherein: a plurality of control units are detachably mounted on said portable terminal, figure 1 item 52a, column 3 lines 35-48, column 5 lines 53-60,**

**and one or more control units can be selected from said plurality of control units, column 3 lines 35-48,**

**said portable terminal using the selected control units for input, column 4 lines 35-48,**

and wherein: said portable terminal comprises contact detection plates for detecting contact on plate surfaces and accepts input from said control units based on the result of detection performed by said contact detection plates, **column 4 lines 1-11, column 4 lines 55-67;**

and each of said control units comprises movable contacts which, when said control unit is mounted on said portable terminal in such away as to lie on one of said contact detection plates, come into and out of contact with said contact detection plate by move, **column 3 lines 35-48, column 4 lines 1-11.**

Wherein as shown in figures 1 and 2 a portable device 10 includes a plurality of detachable input device modules 52a and 52b, each being received at the portable device cutout area 28, and connecting via a socket and mounting pins contact section to the device 10, for the purpose of moving the cursor on the display of device 10.

**As in claim 8, Youens et al. teaches of** wherein said portable terminal comprises portable-terminal-side connection terminals for connecting electrically with said control units and accepts input from said control units through electrical communications with said portable-terminal-side connection terminals, **figure 5 item 76, column 4 lines 1-11, column 4 lines 55-67;**

and each of said control units comprises a control-unit-side connection terminal for connecting electrically with one of said portable-terminal-side connection

terminals and operation means to be operated by the user, figure 5 item 74,  
**column 4 lines 1-11, column 4 lines 55-67,**

and in response to the operation of said operation means, changes the content of electrical signals associated with electrical communications between said control-unit-side connection terminal and said portable-terminal-side connection terminal,  
**column 5 lines 1-13.**

**As in claim 15, Paolucci et al. teaches of** a computer-readable medium having encoded thereon a computer-readable input program to be executed by the input system for a portable terminal according for use with a computer system, column 4 lines 55-67, column 5 lines 1-11, wherein a cursor input program is inherent to the modular pointing device.

wherein said input program when executed causes said computer system to select one or more control units from said plurality of control units and makes input to be accepted in said portable terminal via the selected control unit.,  
column 2 lines 15-35, column 4 lines 55-67, column 5 lines 1-11.

Wherein the portable computer has an interchangeable pointing device where the input program when executed causes the computer system to select a control unit based on the users selection of a plurality of optional pointing devices.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 2. Claims 5-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganthier et al. (5865546) in view of Anderson et al. (6104604).**

**As in claim 5, Ganthier et al. teaches of an input system for a terminal, figure 1 item 100,**

**comprising a terminal which uses a control unit for input, figure 4 item 100 and 200, column 6 lines 25-30,**

**wherein: a plurality of control units are detachably mounted on said terminal, figure 1 items 130, 140, 150, column 3 lines 40-61**

**and one or more control units can be selected from said plurality of control units, figure 1 items 130, 140, 150, column 3 lines 40-61,**

**said terminal using the selected control units for input, column 3 lines 40-61, column 6 lines 25-30,**

detection plates for detecting contact on plate surfaces and accepts input from said control units based on the result of detection performed by said contact detection plates, column 5 lines 35-45

and each of said control units comprises movable contacts which, when said control unit is mounted on said terminal in such away as to lie on one of said contact detection plates, come into and out of contact with said contact detection plate by move, column 5 lines 35-45

**However Ganthier et al. fails to teach** of said modular control units within a portable terminal.

**Anderson et al. teaches** of having a modular control unit within a portable terminal, figure 4 item 200.

Given that Anderson teaches a modular control unit as taught by Ganthier et al., can be used in a portable terminal, as taught by Anderson et al., **it would have been obvious to the skilled artisan** at the time of the invention to provide the detachable/modular control units within a portable terminal as found in claim 5.

**As in claim 6, Ganthier et al. teaches of** wherein each of said control units comprises ID contacts which come into contact with unique parts of said contact detection plate when said control unit is mounted on said portable terminal in such a way as to lie on said contact detection plate, column 6 lines 1-25;

and said portable terminal detects the places of contact between said contact detection plate and ID contacts and identifies said control unit based on the result of the detection, column 6 lines 1-25.

**As in claim 7, Ganthier et al. teaches of** said portable terminal comprises storage means for storing control unit information for each of said control units, wherein the processing resources include storage, and the input device may be coded said code stored in the hardware for the input device, column 6 lines 1-25

detects the places of contact between said contact detection plate and said ID contacts, column 6 lines 1-25

searches said storage means for appropriate control unit information based on the result of the detection, column 6 lines 1-25

and identifies said control unit based on the retrieved control unit information, column 6 lines 1-25.

Wherein based on the identification information the system loads from storage the appropriate drivers for the selected control units, and upon replacement polls the control units new identification information to load a new driver from storage.



**As in claim 8, Ganthier et al. teaches of** wherein said portable terminal comprises portable-terminal-side connection terminals for connecting electrically with said control units and accepts input from said control units through electrical communications with said portable-terminal-side connection terminals, figure 1 item 113, column 5 lines 14-44;

and each of said control units comprises a control-unit-side connection terminal for connecting electrically with one of said portable-terminal-side connection terminals and operation means to be operated by the user, figure 1 item 146, column 5 lines 14-44.

and in response to the operation of said operation means, changes the content of electrical signals associated with electrical communications between said control-unit-side connection terminal and said portable-terminal-side connection terminal, column 6 lines 15-35.

**As in claim 9, Ganthier et al. teaches of** each of said control units connects ID circuit to said control-unit-side connection terminal, column 6 lines 15-35,

said ID circuit changes the content of electrical signals associated with electrical communications between said control-unit-side connection terminal and said portable-terminal-side connection terminal into unique content, column 6 lines 15-35,

and said portable terminal identifies said control unit based on the electrical communications between said portable-terminal-side connection terminal and said ID circuit, column 6 lines 15-35.

**As in claim 10, Ganthier et al. teaches of** wherein said portable terminal comprises storage means for storing control unit information for each of said control units, wherein the processing resources include storage, and the input device may be coded said code stored in the hardware for the input device, column 6 lines 15-35,

acquires ID information based on electrical communications between said portable-terminal-side connection terminal and said ID circuit, column 6 lines 15-35

searches said storage means for appropriate control unit information based on the acquired ID information, column 6 lines 15-35

and identifies said control unit based on the retrieved control unit information, column 6 lines 15-35.

**As in claim 11, Ganthier et al. teaches of**, wherein, said portable terminal requires, during application start-up, for one or more of said control units to be selected and when one or more control units are selected, accepts input for the application from the selected control units, column 6 lines 15-35.

**As in claim 15, Ganthier et al. teaches of** a computer-readable medium having encoded thereon a computer-readable input program to be executed by the input system for a terminal according for use with a computer system, **column 6 lines 15-35**, control module drivers retrieved from storage.

wherein said input program when executed causes said computer system to select one or more control units from said plurality of control units and makes input to be accepted in said terminal via the selected control unit., **column 6 lines 15-35**, drivers are selected based on identification code information.

**However Ganthier et al. fails to teach** of said modular control units within a portable terminal.

**Anderson et al. teaches** of having a modular control unit within a portable terminal, figure 4 item 200.

Given that Anderson teaches a modular control unit as taught by Ganthier et al., can be used in a portable terminal, as taught by Anderson et al., **it would have been obvious to the skilled artisan** at the time of the invention to provide the detachable/modular control units within a portable terminal as found in claim 15.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection. See the new 102 rejection over Youens (5793355) and the 103 rejection over Ganthier (5865546) in view of Anderson (6104604). This office action replaces the previous final office action of 7/14/2005 to correct errors in the cited prior art. The Examiner apologizes for any delays in prosecution.

### ***Conclusion***


4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim et al. (2001/0033267) teaches of detachable input modules having ID code information to identify the device. Kikinis et al. (6523079) teaches of detachable input modules having ID code information to identify the device. Kozak et al. (6972945) teaches of modular input devices. Lee (6219037) teaches of a detachable input device. Bronson (6665741) teaches of a removable I/O device.
5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the

THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David L. Lewis** whose telephone number is **(571) 272-7673**. The examiner can normally be reached on MT and THF from 8 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached on **(571) 272-7681**. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571)-273-8300.
7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

---

Examiner: David L. Lewis  
**December 30, 2005**

  
**BIPIN SHALWALA**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600